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Serial No. 10/799,673

IN THE CLAIMS

Claims 1-14 (Canceled)

15. (Currently amended) A high frequency power amplifier module, comprising:

a high frequency power amplifier and a bias control circuit, each of which is which are monolithically formed on a single semiconductor chip which is mounted on a module and which includes a first input terminal, a second input terminal, a first output terminal, and a second output terminal,

wherein said high frequency power amplifier includes:

a first amplifying system coupled to the first input terminal and to the first output terminal, and including a plurality of first bias terminals, and a plurality of amplifying stages which are sequentially cascaded between said first input terminal and said first output terminal and each of which is coupled to a corresponding one of the plurality of first bias terminals so as to receive a bias potential therefrom, wherein each of said amplifying stages includes a MOSFET having a first conductivity type and a gate coupled to the corresponding first bias terminal, and

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a second amplifying system coupled to the second input terminal and to the second output terminal, and including a plurality of second bias terminals, and a plurality of amplifying stages which are sequentially cascaded between said second input terminal and said second output terminal and each of which is coupled to a corresponding one of the plurality of second bias terminals so as to receive a bias potential therefrom, wherein each of said amplifying stages includes a MOSFET having the first conductivity type and a gate coupled to the corresponding second bias terminal,

wherein said bias control circuit includes a first MOSFET of the first conductivity type and a second MOSFET of a second conductivity type different from the first conductivity type and is coupled to the plurality of first bias terminals and to the plurality of second bias terminals.

(Previously presented) A high frequency power 16. amplifier module according to claim 15,

wherein said high frequency power amplifier module has a first control terminal and a second control terminal, each of which are coupled to said bias control circuit,

wherein said bias control circuit is arranged to receive a first control signal from said first control

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terminal, and to provide a bias voltage in accordance with the first control signal to said first amplifying system, and

wherein said bias control circuit is arranged to receive a second control signal from second control terminal, and to provide a bias voltage in accordance with the second control signal to said second amplifying system.

- 17. (Previously presented). A high frequency power amplifier module according to claim 16, wherein the second MOSFET of the second conductivity type is coupled with the first MOSFET of the first conductivity type in series, the second MOSFET is coupled with a third MOSFET of the second conductivity type in parallel with their respective gate terminals connected to each other, and the gate terminal and drain terminal of the third MOSFET are connected to each other.
- (Previously presented) A high frequency power amplifier module according to claim 16, further comprising third and fourth amplifying systems mounted on the module and located at an outside of said semiconductor chip, said third and fourth amplifying systems being connected to the first

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output terminal and the second output terminal of said high frequency power amplifier, respectively.

- 19. (Previously presented) A high frequency power amplifier module according to claim 18, wherein said bias potential output of said bias control circuit is supplied to the third and the fourth amplifying systems.
- 20. (Previously presented) A high frequency power amplifier module according to claim 19, wherein the second MOSFET of the second conductivity type is coupled with the first MOSFET of the first conductivity type in series, the second MOSFET is coupled with a third MOSFET of the second conductivity type in parallel with their gate terminals connected to each other, and the gate terminal and drain terminal of the third MOSFET are connected to each other.

21-27. (Canceled)

28. (Currently amended) A high frequency power amplifier integrated circuit device-according to claim-27, further comprising:

a first input terminal;

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- a first output terminal;
- a second input terminal;
- a second output terminal; and
- a first amplifying system coupled to the first input terminal and to the first output terminal, including amplifying elements having control terminals, and which are sequentially cascaded between said first input terminal and said first output terminal;

a-plurality-of second amplifying-MOSFETo-each of which has the first conductivity type and a gate terminal, system coupled to the first input terminal and to the first output terminal, including amplifying elements having control terminals and which are sequentially cascaded between said second input terminal and said second output terminal; [[,]]

a bias control circuit coupled to each of the control terminals of the plurality of first and second amplifying systems;

wherein the first amplifying system, the second amplifying system, and the bias control circuit are monolithically formed on a single semiconductor chip

wherein the blas control eircuit is further coupled to the gate terminals of the plurality of second amplifying MOSFETS.

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amplifier module according to claim 15, wherein each of said cascaded amplifying stages in said first amplifying system and said second amplifying system includes a control terminal and an output terminal, wherein said control terminals and said output terminals in each respective stage are alternatively provided in the same direction.

30-31. (Canceled)

- amplifier module according to claim 29, wherein a bias resistance ratio of the first amplifying stage of each of said first and second amplifying systems or bias resistance ratios of the first amplifying stage and second amplifying stage of each of said each of said first amplifying stage and second amplifying stage of each of said first and second amplifying systems can be adjusted.
- 33. (Previously presented) A high frequency power amplifier module according to claim 32, wherein the bias resistance ratio of the first amplifying stage of each of said first and second amplifying systems or the bias resistance ratios of the first amplifying stage and second amplifying

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stage of each of said first and second amplifying systems are adjusted by selecting connecting positions of electrical connectors that connect bias resistors formed on the surface of said semiconductor chip, the selection including a choice of no connection with the electrical connectors.

- 34. (Previously presented) A wireless communication apparatus comprising a high frequency power amplifier module according to claim 15.
- 35. (Currently amended) A high frequency power amplifier integrated circuit device according to claim [[27]] 28, further comprising:

a plurality of bonding pads formed on the single semiconductor chip;

wherein the bias control circuit is coupled to said plurality of bonding pads, and includes a plurality of resistors, said bias control circuit being adapted to apply to one of said first amplifying MOSFETs, a bias potential value which is determined by a combination of resistors in the plurality of resistors, wherein the combination of resistors is determined by an electrical connection between bonding pads in the plurality of bonding pads.

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- 36. (Previously presented) A high frequency power amplifier integrated circuit device according to claim 35, wherein the bias resistance ratio of a first one of said first amplifying MOSFETs or the bias resistance ratios of said first one of said first amplifying MOSFETs and a second one of said first amplifying MOSFETs are adjusted by selecting connecting positions of electrical connectors that connect the plurality of bias resistors formed on the surface of said semiconductor chip, the choice including no connection with the electrical connectors.
- 37. (Currently amended) A wireless communication apparatus comprising a high frequency power amplifier integrated circuit device according to claim [[27]] 28.